

**Salt Dome Province Tertiary Sandstones, Assessment Unit 60350103**  
**Assessment Results Summary**

[MMBO, million barrels of oil. BCFG, billion cubic feet of gas. MMBNGL, million barrels of natural gas liquids. MFS, minimum field size assessed (MMBO or BCFG). Prob., probability (including both geologic and accessibility probabilities) of at least one field equal to or greater than the MFS. Results shown are fully risked estimates. For gas fields, all liquids are included under the NGL (natural gas liquids) category. F95 represents a 95 percent chance of at least the amount tabulated. Other fractiles are defined similarly. Fractiles are additive under the assumption of perfect positive correlation. Shading indicates not applicable]

Field Type	MFS	Prob. (0-1)	Undiscovered Resources												Largest Undiscovered Field (MMBO or BCFG)			
			Oil (MMBO)				Gas (BCFG)				NGL (MMBNGL)				F95	F50	F5	Mean
Oil Fields	8	0.60	0	3,060	14,423	4,493	0	2,040	10,433	3,143	0	58	322	94	391	1,466	4,906	1,872
Gas Fields	48						0	383	3,320	888	0	8	74	19	98	419	1,873	620
Total		0.60	0	3,060	14,423	4,493	0	2,423	13,753	4,031	0	66	397	114				

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**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

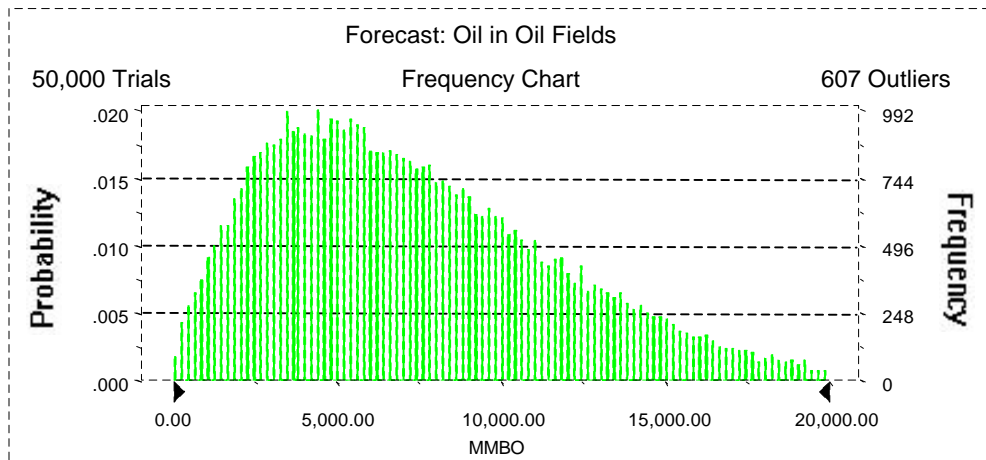
**Forecast: Oil in Oil Fields**

**Summary:**

Display range is from 0.00 to 20,000.00 MMBO  
Entire range is from 9.27 to 39,356.54 MMBO  
After 50,000 trials, the standard error of the mean is 20.34

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	7,483.09
Median	6,716.85
Mode	---
Standard Deviation	4,548.31
Variance	20,687,125.04
Skewness	0.85
Kurtosis	3.63
Coefficient of Variability	0.61
Range Minimum	9.27
Range Maximum	39,356.54
Range Width	39,347.27
Mean Standard Error	20.34



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**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

**Forecast: Oil in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	9.27
95%	1,501.82
90%	2,269.89
85%	2,872.96
80%	3,438.91
75%	3,973.62
70%	4,512.93
65%	5,040.50
60%	5,574.08
55%	6,116.64
50%	6,716.85
45%	7,322.66
40%	7,958.80
35%	8,646.46
30%	9,394.03
25%	10,213.46
20%	11,167.61
15%	12,352.96
10%	13,818.25
5%	16,018.96
0%	39,356.54

End of Forecast

**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

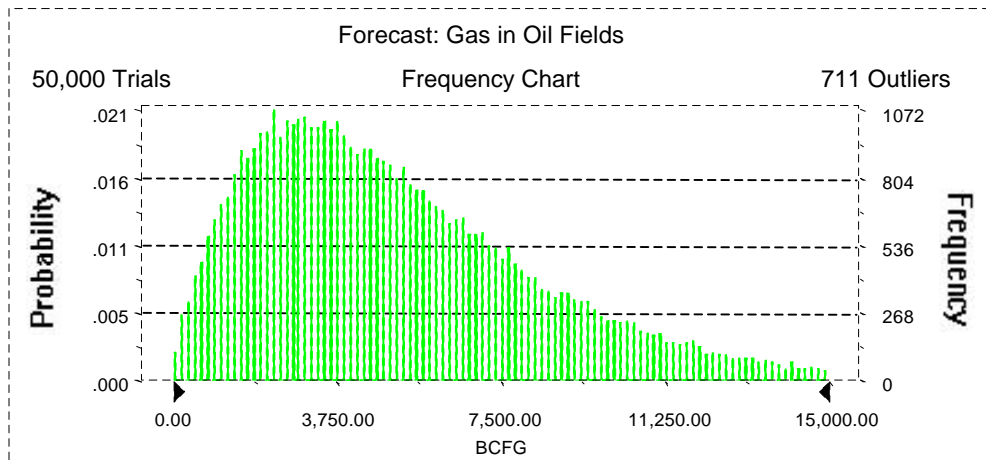
**Forecast: Gas in Oil Fields**

**Summary:**

Display range is from 0.00 to 15,000.00 BCFG  
Entire range is from 5.94 to 29,849.49 BCFG  
After 50,000 trials, the standard error of the mean is 15.32

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	5,235.01
Median	4,552.83
Mode	---
Standard Deviation	3,425.15
Variance	11,731,675.87
Skewness	1.11
Kurtosis	4.54
Coefficient of Variability	0.65
Range Minimum	5.94
Range Maximum	29,849.49
Range Width	29,843.54
Mean Standard Error	15.32



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**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

**Forecast: Gas in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	5.94
95%	985.48
90%	1,493.93
85%	1,905.15
80%	2,291.68
75%	2,656.34
70%	3,020.73
65%	3,387.61
60%	3,756.78
55%	4,140.42
50%	4,552.83
45%	4,978.64
40%	5,424.28
35%	5,922.01
30%	6,481.89
25%	7,097.65
20%	7,807.26
15%	8,734.76
10%	9,925.54
5%	11,827.61
0%	29,849.49

End of Forecast

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**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

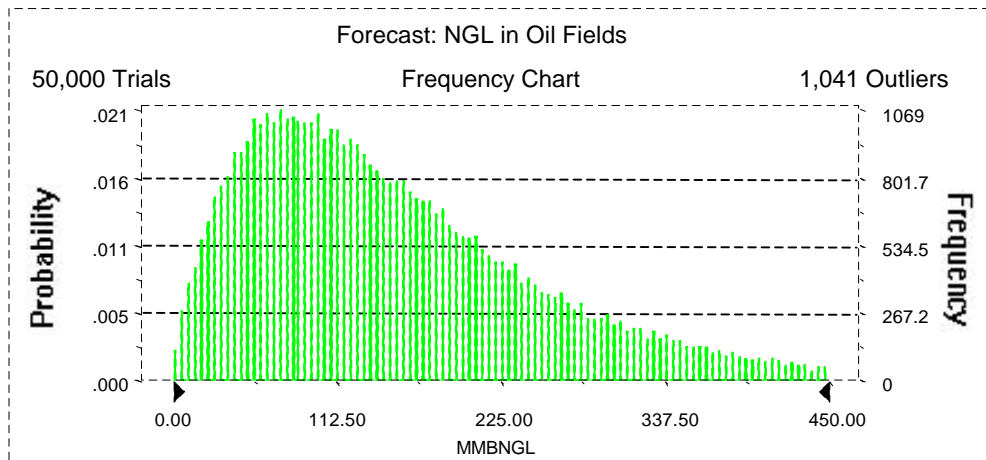
**Forecast: NGL in Oil Fields**

**Summary:**

Display range is from 0.00 to 450.00 MMBNGL  
Entire range is from 0.14 to 948.65 MMBNGL  
After 50,000 trials, the standard error of the mean is 0.49

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	156.98
Median	132.47
Mode	---
Standard Deviation	109.58
Variance	12,007.69
Skewness	1.32
Kurtosis	5.41
Coefficient of Variability	0.70
Range Minimum	0.14
Range Maximum	948.65
Range Width	948.51
Mean Standard Error	0.49



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**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

**Forecast: NGL in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.14
95%	27.57
90%	41.93
85%	54.14
80%	65.06
75%	75.91
70%	86.69
65%	97.69
60%	108.88
55%	120.46
50%	132.47
45%	145.72
40%	160.07
35%	175.34
30%	192.10
25%	211.44
20%	234.85
15%	264.62
10%	304.84
5%	370.20
0%	948.65

End of Forecast

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**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

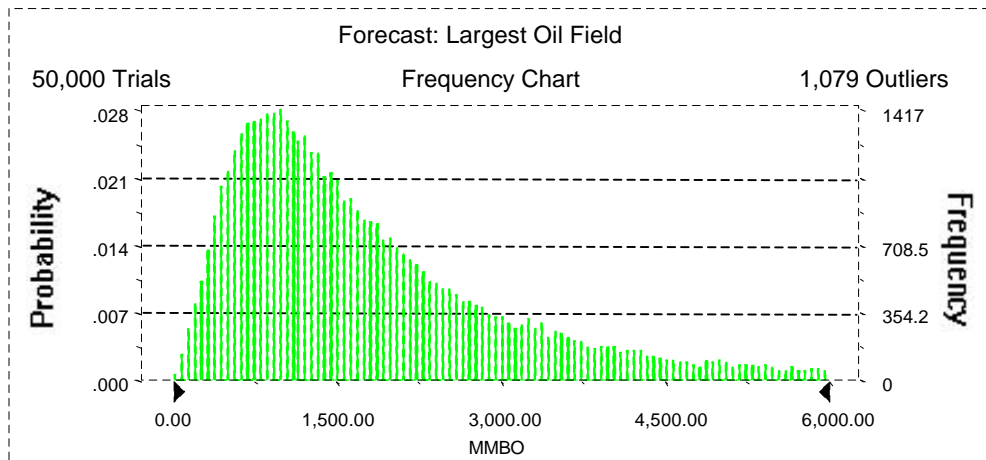
**Forecast: Largest Oil Field**

**Summary:**

Display range is from 0.00 to 6,000.00 MMBO  
Entire range is from 9.27 to 7,499.28 MMBO  
After 50,000 trials, the standard error of the mean is 6.26

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	1,871.79
Median	1,465.83
Mode	---
Standard Deviation	1,400.20
Variance	1,960,547.45
Skewness	1.49
Kurtosis	5.18
Coefficient of Variability	0.75
Range Minimum	9.27
Range Maximum	7,499.28
Range Width	7,490.01
Mean Standard Error	6.26





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**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

**Forecast: Largest Oil Field (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	9.27
95%	391.16
90%	537.38
85%	657.17
80%	768.03
75%	876.50
70%	983.93
65%	1,094.18
60%	1,209.99
55%	1,332.05
50%	1,465.83
45%	1,613.45
40%	1,776.20
35%	1,962.95
30%	2,177.49
25%	2,438.94
20%	2,771.90
15%	3,218.48
10%	3,809.16
5%	4,906.16
0%	7,499.28

End of Forecast

**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

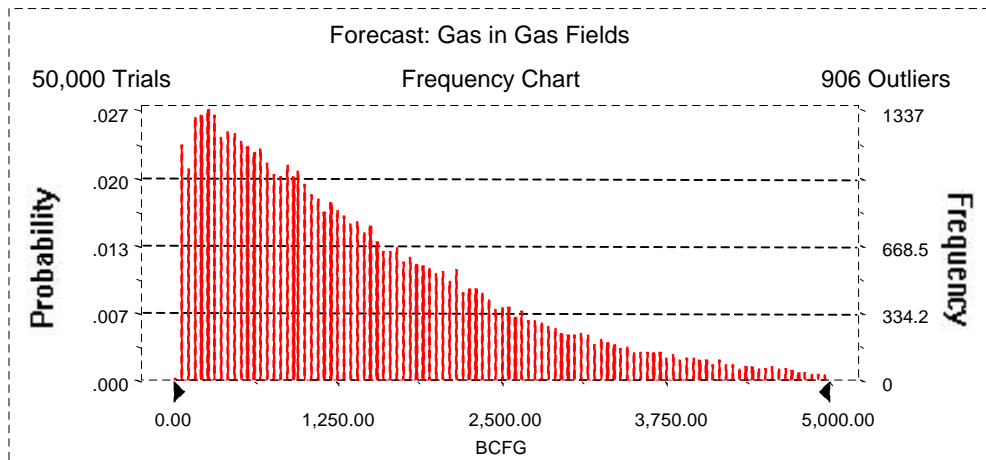
**Forecast: Gas in Gas Fields**

**Summary:**

Display range is from 0.00 to 5,000.00 BCFG  
Entire range is from 49.03 to 12,589.29 BCFG  
After 50,000 trials, the standard error of the mean is 5.47

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	1,477.70
Median	1,161.75
Mode	---
Standard Deviation	1,223.53
Variance	1,497,031.62
Skewness	1.52
Kurtosis	6.20
Coefficient of Variability	0.83
Range Minimum	49.03
Range Maximum	12,589.29
Range Width	12,540.26
Mean Standard Error	5.47



**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

**Forecast: Gas in Gas Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	49.03
95%	159.95
90%	255.48
85%	350.31
80%	452.53
75%	556.55
70%	667.24
65%	782.51
60%	901.97
55%	1,025.80
50%	1,161.75
45%	1,309.00
40%	1,467.14
35%	1,644.45
30%	1,844.46
25%	2,067.29
20%	2,320.57
15%	2,652.96
10%	3,113.88
5%	3,886.19
0%	12,589.29

End of Forecast

**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

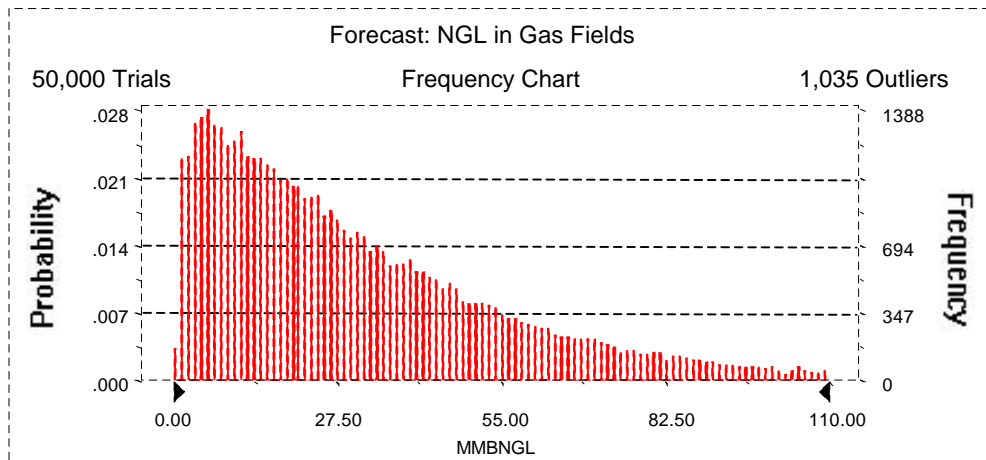
**Forecast: NGL in Gas Fields**

**Summary:**

Display range is from 0.00 to 110.00 MMBNGL  
Entire range is from 0.61 to 258.59 MMBNGL  
After 50,000 trials, the standard error of the mean is 0.13

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	32.44
Median	24.82
Mode	---
Standard Deviation	28.02
Variance	785.35
Skewness	1.70
Kurtosis	7.19
Coefficient of Variability	0.86
Range Minimum	0.61
Range Maximum	258.59
Range Width	257.98
Mean Standard Error	0.13



**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

**Forecast: NGL in Gas Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.61
95%	3.34
90%	5.40
85%	7.39
80%	9.57
75%	11.77
70%	14.14
65%	16.60
60%	19.19
55%	21.93
50%	24.82
45%	27.94
40%	31.54
35%	35.43
30%	39.95
25%	44.86
20%	50.96
15%	58.61
10%	69.56
5%	87.37
0%	258.59

End of Forecast

**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

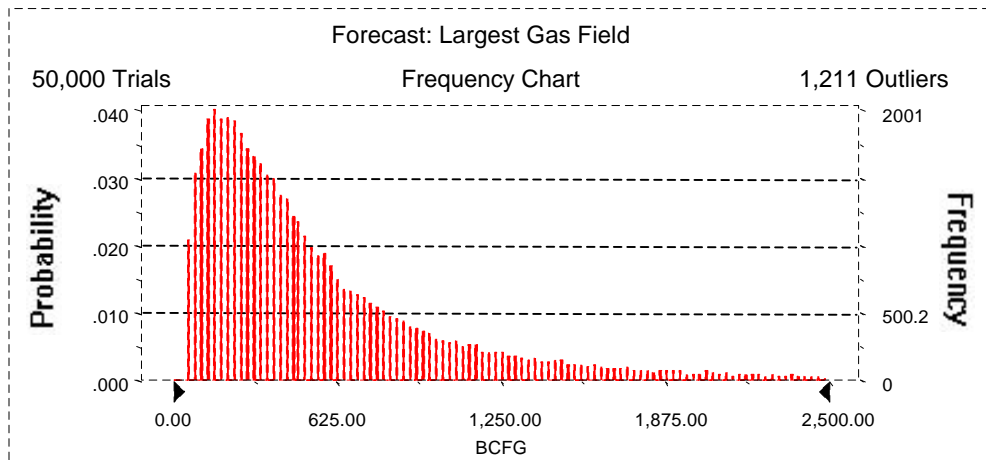
**Forecast: Largest Gas Field**

Summary:

Display range is from 0.00 to 2,500.00 BCFG  
Entire range is from 49.03 to 4,796.96 BCFG  
After 50,000 trials, the standard error of the mean is 2.81

Statistics:

	<u>Value</u>
Trials	50000
Mean	620.08
Median	419.41
Mode	---
Standard Deviation	627.84
Variance	394,180.06
Skewness	2.62
Kurtosis	12.01
Coefficient of Variability	1.01
Range Minimum	49.03
Range Maximum	4,796.96
Range Width	4,747.93
Mean Standard Error	2.81



**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

**Forecast: Largest Gas Field (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	49.03
95%	98.32
90%	134.27
85%	165.52
80%	197.76
75%	229.51
70%	262.83
65%	298.26
60%	335.76
55%	376.32
50%	419.41
45%	467.58
40%	522.64
35%	586.93
30%	665.57
25%	763.85
20%	888.66
15%	1,062.72
10%	1,330.53
5%	1,873.29
0%	4,796.96

End of Forecast

**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

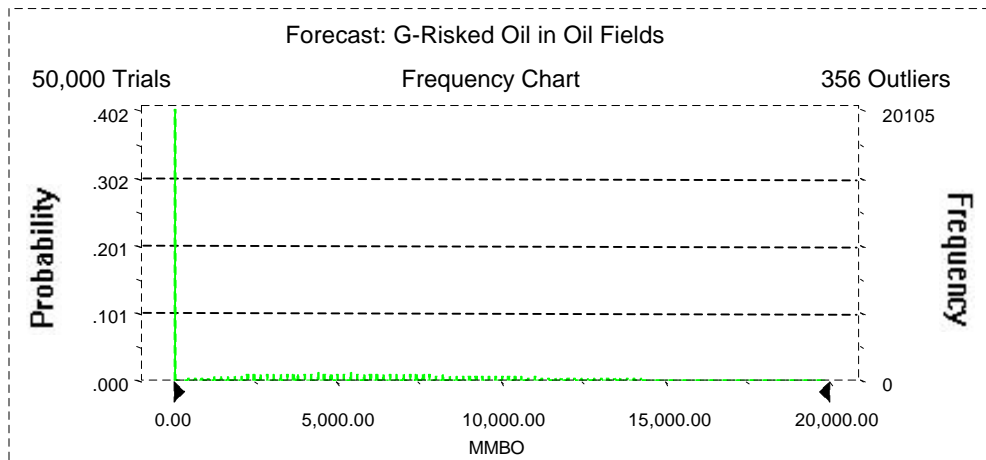
**Forecast: G-Riskd Oil in Oil Fields**

**Summary:**

Display range is from 0.00 to 20,000.00 MMBO  
Entire range is from 0.00 to 31,014.88 MMBO  
After 50,000 trials, the standard error of the mean is 22.75

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	4,492.52
Median	3,059.78
Mode	0.00
Standard Deviation	5,087.66
Variance	25,884,299.08
Skewness	1.05
Kurtosis	3.52
Coefficient of Variability	1.13
Range Minimum	0.00
Range Maximum	31,014.88
Range Width	31,014.88
Mean Standard Error	22.75





**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

**Forecast: G-Risk Oil in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	0.00
75%	0.00
70%	0.00
65%	0.00
60%	0.00
55%	2,010.79
50%	3,059.78
45%	3,976.45
40%	4,894.89
35%	5,764.08
30%	6,725.42
25%	7,756.95
20%	8,909.58
15%	10,235.05
10%	11,918.77
5%	14,423.46
0%	31,014.88

End of Forecast

**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

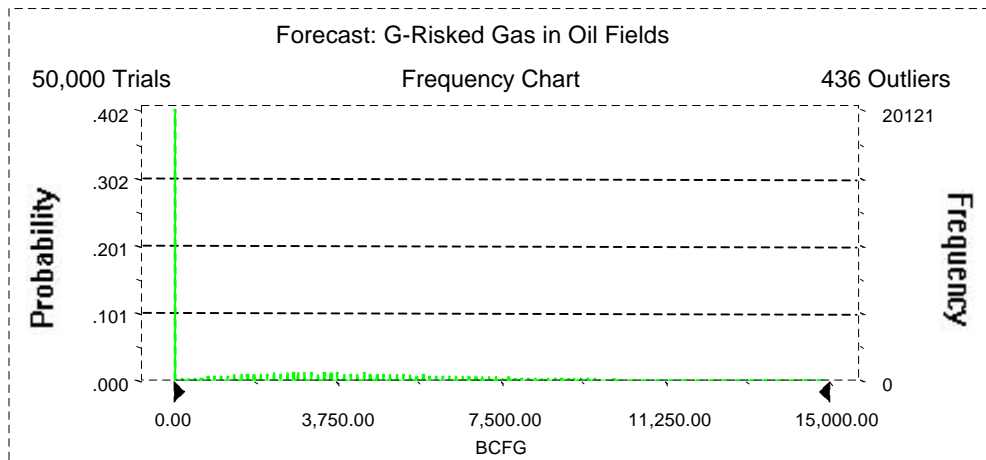
**Forecast: G-Riskd Gas in Oil Fields**

**Summary:**

Display range is from 0.00 to 15,000.00 BCFG  
Entire range is from 0.00 to 26,107.78 BCFG  
After 50,000 trials, the standard error of the mean is 16.52

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	3,143.19
Median	2,039.53
Mode	0.00
Standard Deviation	3,693.77
Variance	13,643,903.34
Skewness	1.28
Kurtosis	4.54
Coefficient of Variability	1.18
Range Minimum	0.00
Range Maximum	26,107.78
Range Width	26,107.78
Mean Standard Error	16.52



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**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

**Forecast: G-Risk Gas in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	0.00
75%	0.00
70%	0.00
65%	0.00
60%	0.00
55%	1,320.91
50%	2,039.53
45%	2,672.74
40%	3,279.39
35%	3,901.15
30%	4,568.91
25%	5,292.19
20%	6,108.37
15%	7,084.19
10%	8,377.43
5%	10,433.22
0%	26,107.78

End of Forecast

**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

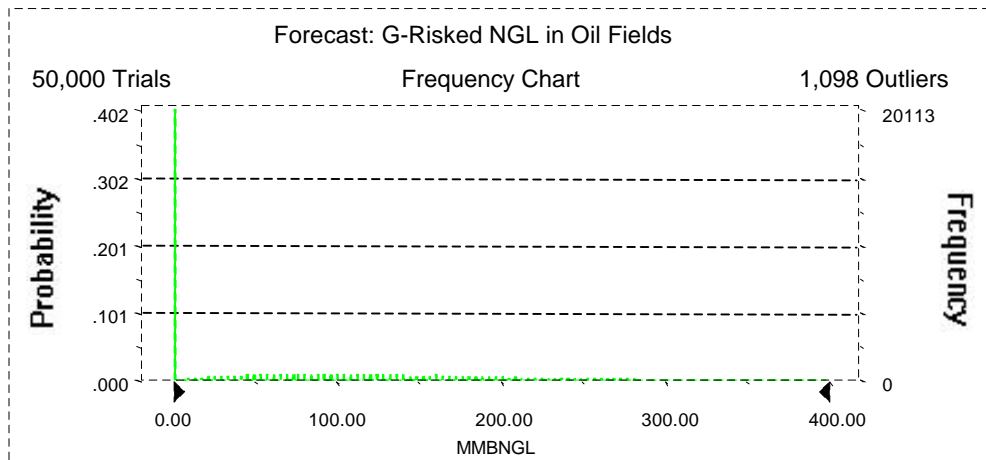
**Forecast: G-Riskd NGL in Oil Fields**

**Summary:**

Display range is from 0.00 to 400.00 MMBNGL  
Entire range is from 0.00 to 929.92 MMBNGL  
After 50,000 trials, the standard error of the mean is 0.51

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	94.41
Median	57.90
Mode	0.00
Standard Deviation	114.90
Variance	13,202.02
Skewness	1.48
Kurtosis	5.51
Coefficient of Variability	1.22
Range Minimum	0.00
Range Maximum	929.92
Range Width	929.92
Mean Standard Error	0.51



**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

**Forecast: G-Riskd NGL in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	0.00
75%	0.00
70%	0.00
65%	0.00
60%	0.00
55%	37.06
50%	57.90
45%	76.42
40%	94.54
35%	113.04
30%	133.08
25%	156.05
20%	180.96
15%	211.97
10%	253.07
5%	322.45
0%	929.92

End of Forecast

**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

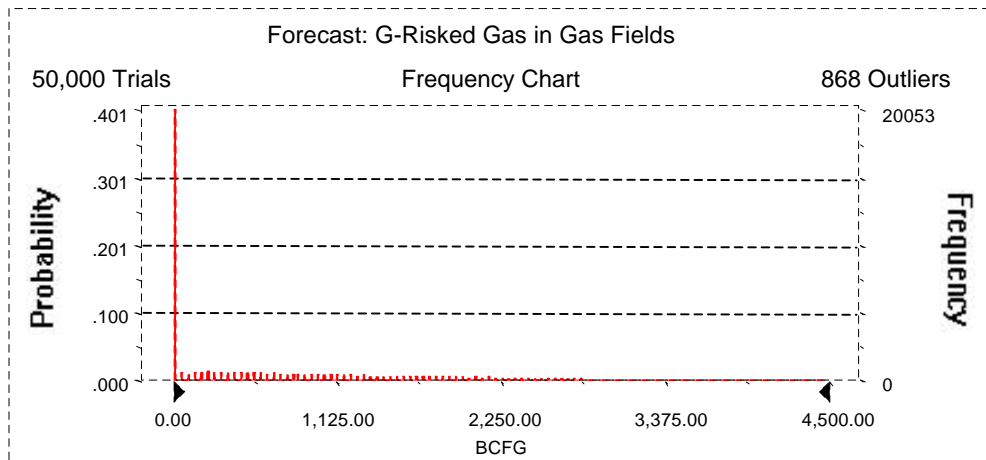
**Forecast: G-Riskd Gas in Gas Fields**

**Summary:**

Display range is from 0.00 to 4,500.00 BCFG  
Entire range is from 0.00 to 12,589.29 BCFG  
After 50,000 trials, the standard error of the mean is 5.36

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	888.31
Median	383.02
Mode	0.00
Standard Deviation	1,198.43
Variance	1,436,234.16
Skewness	1.86
Kurtosis	7.35
Coefficient of Variability	1.35
Range Minimum	0.00
Range Maximum	12,589.29
Range Width	12,589.29
Mean Standard Error	5.36



**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

**Forecast: G-Risk Gas in Gas Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	0.00
75%	0.00
70%	0.00
65%	0.00
60%	0.00
55%	222.89
50%	383.02
45%	554.52
40%	738.29
35%	947.31
30%	1,162.11
25%	1,412.16
20%	1,711.85
15%	2,072.54
10%	2,541.92
5%	3,319.58
0%	12,589.29

End of Forecast

**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

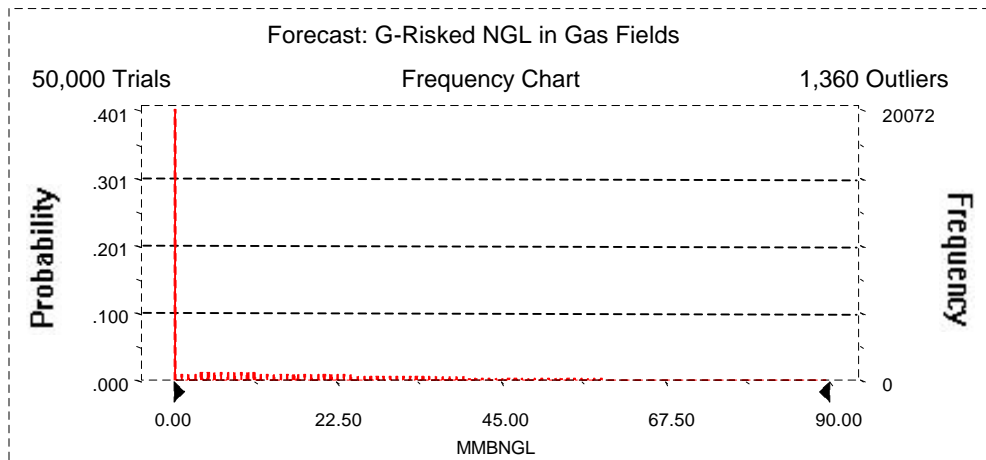
**Forecast: G-Riskd NGL in Gas Fields**

**Summary:**

Display range is from 0.00 to 90.00 MMBNGL  
Entire range is from 0.00 to 258.59 MMBNGL  
After 50,000 trials, the standard error of the mean is 0.12

**Statistics:**

	<u>Value</u>
Trials	50000
Mean	19.48
Median	8.07
Mode	0.00
Standard Deviation	26.96
Variance	726.94
Skewness	2.02
Kurtosis	8.43
Coefficient of Variability	1.38
Range Minimum	0.00
Range Maximum	258.59
Range Width	258.59
Mean Standard Error	0.12





**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

**Forecast: G-Riskied NGL in Gas Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	0.00
95%	0.00
90%	0.00
85%	0.00
80%	0.00
75%	0.00
70%	0.00
65%	0.00
60%	0.00
55%	4.68
50%	8.07
45%	11.70
40%	15.79
35%	20.17
30%	24.83
25%	30.37
20%	37.01
15%	44.87
10%	55.71
5%	74.24
0%	258.59

End of Forecast

**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

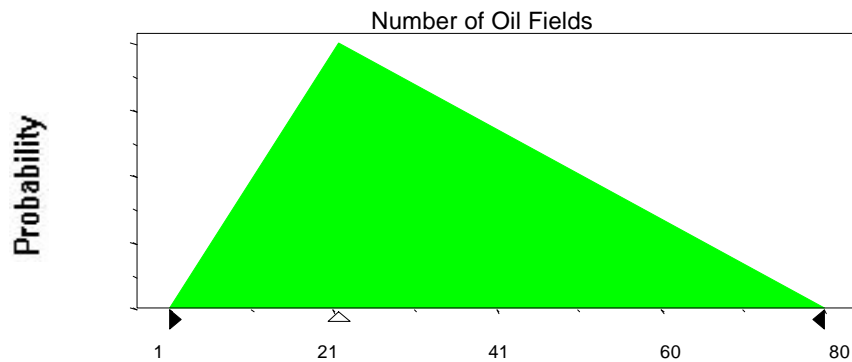
**Assumptions**

**Assumption: Number of Oil Fields**

Triangular distribution with parameters:

Minimum	1
Likeliest	22
Maximum	80

Selected range is from 1 to 80  
Mean value in simulation was 34



**Assumption: Sizes of Oil Fields**

Lognormal distribution with parameters:

Mean	222.85
Standard Deviation	652.75

Shifted parameters

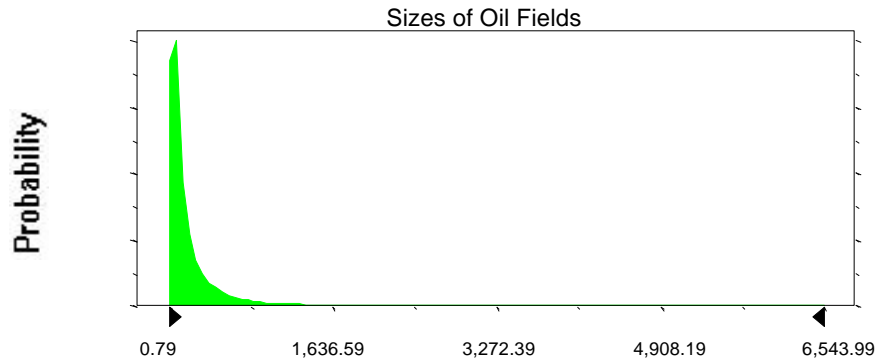
230.85
652.75

Selected range is from 0.00 to 7,492.00  
Mean value in simulation was 213.01

8.00 to 7,500.00  
221.01

**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

**Assumption: Sizes of Oil Fields (cont'd)**



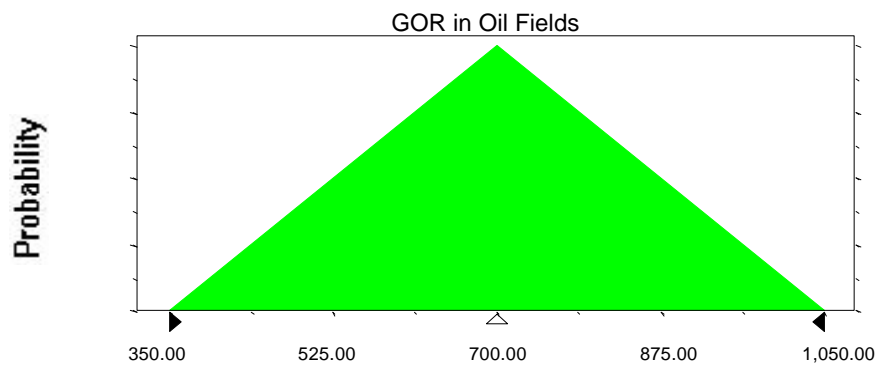
**Assumption: GOR in Oil Fields**

Triangular distribution with parameters:

Minimum	350.00
Likeliest	700.00
Maximum	1,050.00

Selected range is from 350.00 to 1,050.00

Mean value in simulation was 699.62



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**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

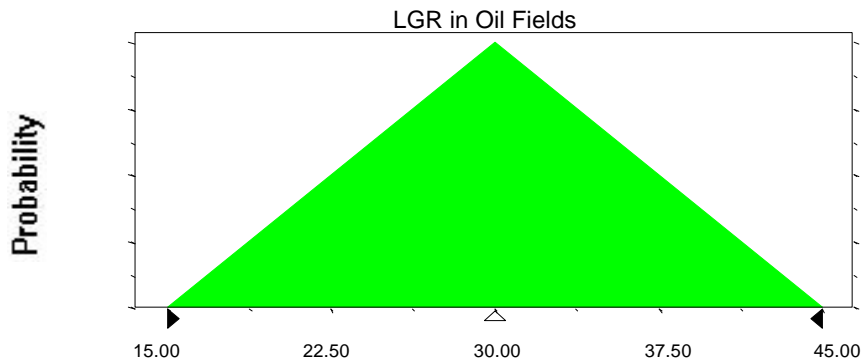
**Assumption: LGR in Oil Fields**

Triangular distribution with parameters:

Minimum	15.00
Likeliest	30.00
Maximum	45.00

Selected range is from 15.00 to 45.00

Mean value in simulation was 29.96



**Assumption: Number of Gas Fields**

Triangular distribution with parameters:

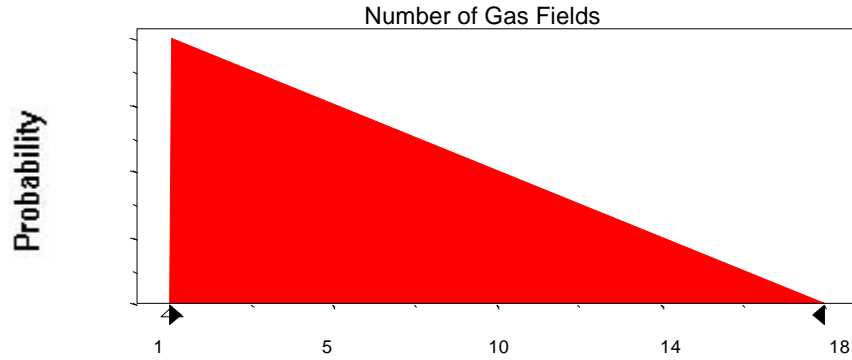
Minimum	1
Likeliest	1
Maximum	18

Selected range is from 1 to 18

Mean value in simulation was 7

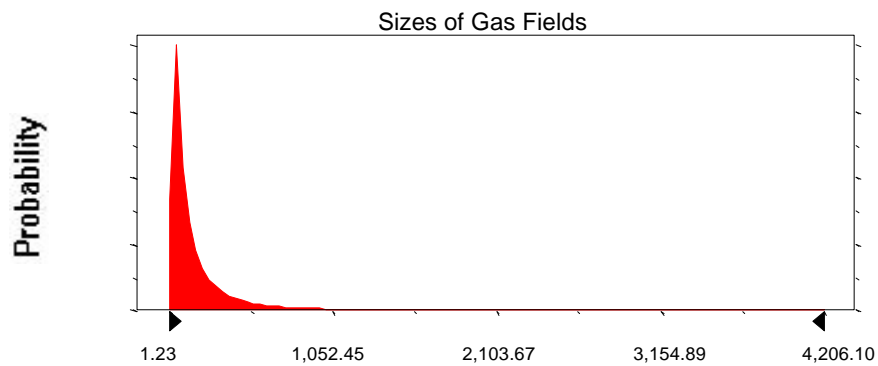
**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

**Assumption: Number of Gas Fields (cont'd)**



**Assumption: Sizes of Gas Fields**

Lognormal distribution with parameters:		Shifted parameters
Mean	180.52	228.52
Standard Deviation	415.07	415.07
Selected range is from 0.00 to 4,752.00		48.00 to 4,800.00
Mean value in simulation was 173.62		221.62



**60350103**  
**Salt Dome Province Tertiary Sandstones**  
**Monte Carlo Results**

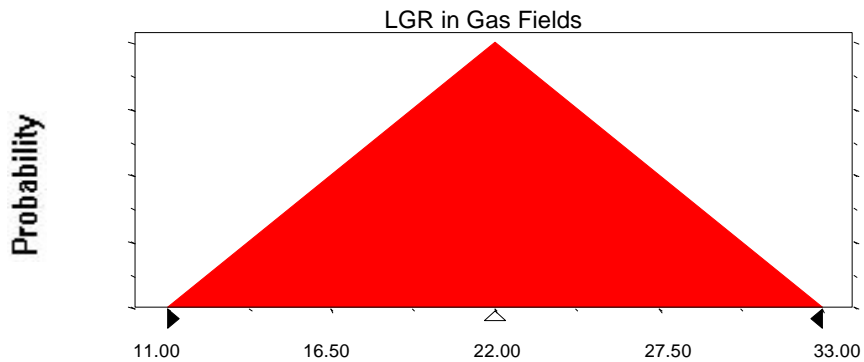
**Assumption: LGR in Gas Fields**

Triangular distribution with parameters:

Minimum	11.00
Likeliest	22.00
Maximum	33.00

Selected range is from 11.00 to 33.00

Mean value in simulation was 21.99



End of Assumptions

Simulation started on 11/8/99 at 11:00:35

Simulation stopped on 11/8/99 at 11:27:35